

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A polypeptide isolated from mammals, ~~characterized in that it comprises comprising~~, at its C-terminal end, a heptapeptide having the following sequence: ~~Cys-Phe-Trp-Lys-Tyr-Cys-Xaa~~ Cys-Phe-Trp-Lys-Tyr-Cys-Xaa, in which Xaa represents Val or Ile, in that it belongs to the urotensin II family and ~~in that it exhibits at least 45% similarity with the polypeptide sequence SEQ ID NO:1, corresponding to human prepro-urotensin II is selected from the group consisting of the human sequences SEQ ID NO:1-3, the rat sequences SEQ ID NO:30-32, and the mouse sequences SEQ ID NO:33-35.~~

2. (Canceled)

3. (Withdrawn) A purified nucleic acid fragment, characterized in that it is selected from the group consisting of:

- the fragments comprising at least one sequence encoding a polypeptide as claimed in claim 1,
- the fragments consisting of a sequence encoding a polypeptide as claimed in claim 1,
- the oligonucleotides derived from the sequences as defined in b), constituting probes or primers, and
- the sequences complementary to the above sequences, which may be sense or antisense sequences, with the exception of the EST having the Gen Bank accession number AA535545.

4. (Withdrawn) The nucleic acid fragment as claimed in claim 3, charachterized in that it is selected from the group consisting of the sequences SEQ ID NO:4-6, the sequences SEQ ID NO:18-20 and the sequences SEQ ID NO:27-29.

5. (Withdrawn) A recombinant vector, characterized in that it contains a nucleic acid fragment as claimed in claim 3.

6. (Withdrawn) A cell transformed with at least one nucleic acid fragment as claimed in claim 3.

7. (Withdrawn) A reagent for detecting a nucleic acid fragment as claimed in claim 3, characterized in that it comprises between 20 and 50 nucleotides of the sequence SEQ ID NO:4, of the sequence SEQ ID NO:18 or of the sequence SEQ ID NO:27.

8. (Withdrawn) The reagent as claimed in claim 7, characterized in that it is selected from the group consisting of:

- a fragment of the sequence encoding human prepro-urotensin II, which encodes a dipeptide (Pro-Tyr), and which is upstream of the tribasic cleavage site, itself located just upstream of the sequence encoding human urotensin II and specific for said human sequence;

- fragments which can be used as primers: SEQ ID NO:7 and NO:8, SEQ ID NO:10-17; SEQ ID NO:21-26; SEQ ID NO:36-42; and

- fragments which can be used as probes: sequence SEQ ID NO:4 and the fragments consisting of 20 to 50 nucleotides of said sequence SEQ ID NO:4; sequence SEQ ID NO:18 and the fragments consisting of 20 to 50 nucleotides of said sequence SEQ ID NO:18, and sequence SEQ ID NO:27 and the fragments consisting of 20 to 50 nucleotides of said sequence SEQ ID NO:27.

9. (Currently Amended) A pharmaceutical composition, ~~characterized in that it comprises comprising~~ at least one polypeptide isolated from mammals, ~~characterized in that it comprises comprising~~, at its C-terminal end, a heptapeptide having the following sequence: Cys-Phe-Trp-Lys-Tyr-Cys-Xaa Cys-Phe-Trp-Lys-Tyr-Cys-Xaa, in which Xaa represents Val

or Ile, in that it belongs to the urotensin II family and ~~in that it exhibits at least 45% similarity with the polypeptide sequence SEQ ID NO:1, corresponding to human prepro-urotensin II is selected from the group consisting of the human sequences SEQ ID NO:1-3, the rat sequences SEQ ID NO:30-32, and the mouse sequences SEQ ID NO:33-35, or one nucleic acid sequence as claimed in claim 3 encoding all or part of said polypeptides, combined with at least one pharmaceutically acceptable vehicle.~~

10. (Currently Amended) ~~The use of polypeptides belonging to the urotensin II family, or of nucleic acid sequences encoding said polypeptides, for preparing a medicinal product intended to treat neurodegenerative diseases of the spinal cord or traumas to the spinal cord A method of making a medicinal product comprising admixing at least one polypeptide according to claim 1 with at least one pharmaceutically acceptable vehicle.~~

11. (Withdrawn) A process for detecting the presence or absence of an mRNA encoding a mammalian urotensin II, in particular in individuals with a neurodegenerative pathology or a trauma to the spinal cord, by bringing a biological sample into contact with at least one reagent as claimed in claim 7.

12. (Withdrawn) A process for detecting a mutation in the sequence of the gene or of the mRNA encoding urotensin, characterized in that it comprises extracting said DNA or said mRNA from a biological sample and comparing it with the nucleic acid sequences as claimed in claim 3.

13. (Withdrawn) A diagnostic kit intended for detecting an mRNA encoding a mammalian urotensin II, in a biological sample, said mRNA possibly being mutated, characterized in that it comprises at least one sequence as claimed in claim 3.

14. (Currently Amended) A method for selecting candidate anti-hypertensives comprising determining the activity of an anti-hypertensive against a urotensin II family

member selected from the group consisting of the human sequences SEQ ID NO:1-3, the rat sequences SEQ ID NO:30-32, and the mouse sequences SEQ ID NO:33-35 as an antagonist.

15. (Currently Amended) The polypeptide claimed in claim 1 wherein said polypeptide ~~exhibits at least 70% similarity with the polypeptide sequence SEQ ID NO:1, corresponding to human prepro-urotensin-II is selected from the group consisting of the human sequences SEQ ID NO:1-3.~~

16. (New) The polypeptide claimed in claim 1 wherein said polypeptide is selected from the group consisting of the rat sequences SEQ ID NO:30-32.

17. (New) The polypeptide claimed in claim 1 wherein said polypeptide is selected from the group consisting of the mouse sequences SEQ ID NO:33-35.

SUPPORT FOR THE AMENDMENTS

Claim 2 has been canceled.

Claims 1, 9, 10, 14, and 15 have been amended.

Claims 16 and 17 have been added.

The amendment of Claims 1, 9, 10, 14, and 15 and new Claims 16 and 17 are supported by the claims as originally filed, most notably Claim 2.

No new matter has been added by the present amendment.